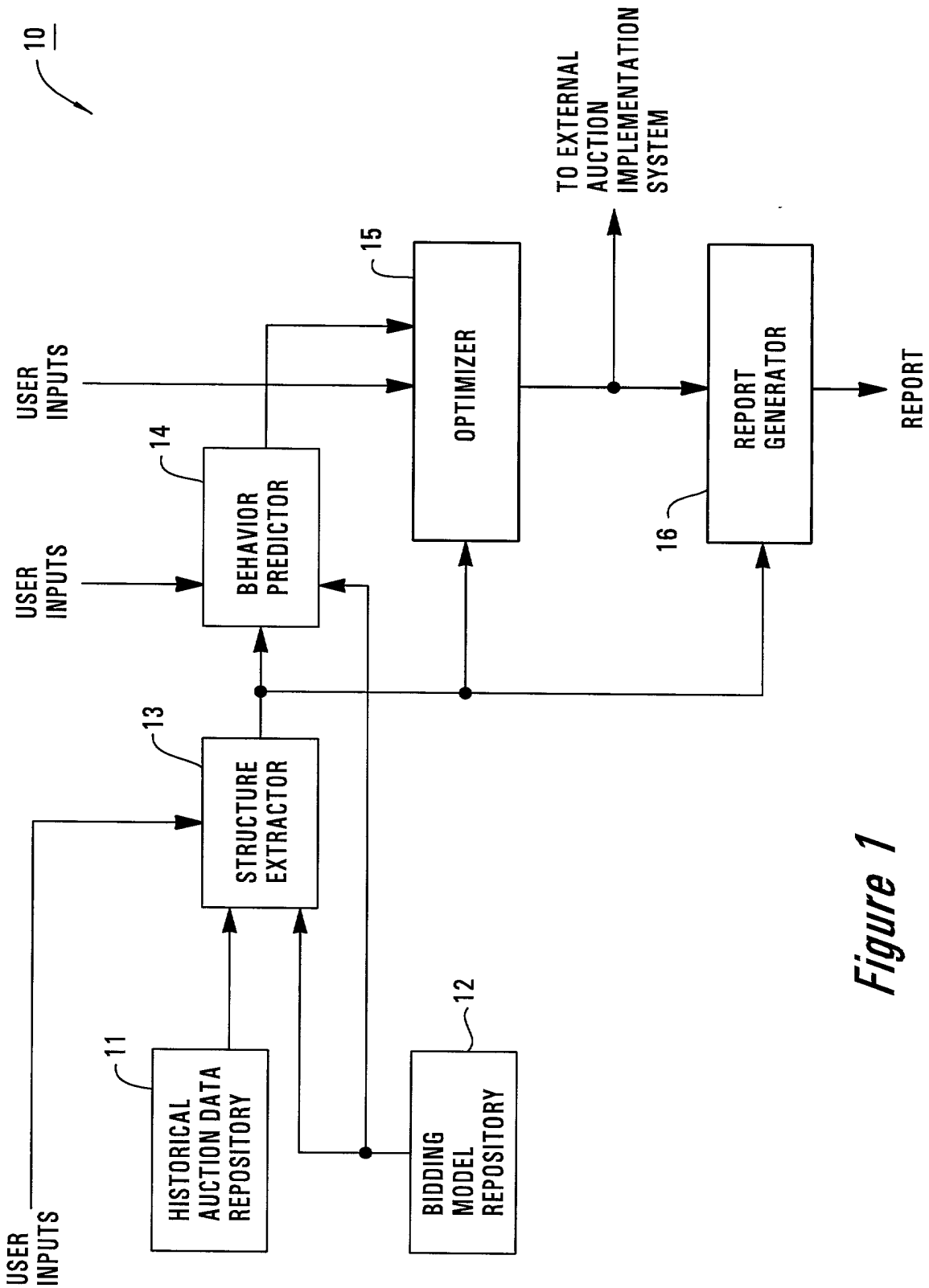
10
USER INPUTS
HISTORICAL AUCTION DATA REPOSITORY
11
BIDDING MODEL REPOSITORY
12
STRUCTURE EXTRACTOR
13
USER INPUTS
BEHAVIOR PREDICTOR
14
USER INPUTS
OPTIMIZER
15
TO EXTERNAL AUCTION IMPLEMENTATION SYSTEM
REPORT GENERATOR
16
REPORT

Figure 1

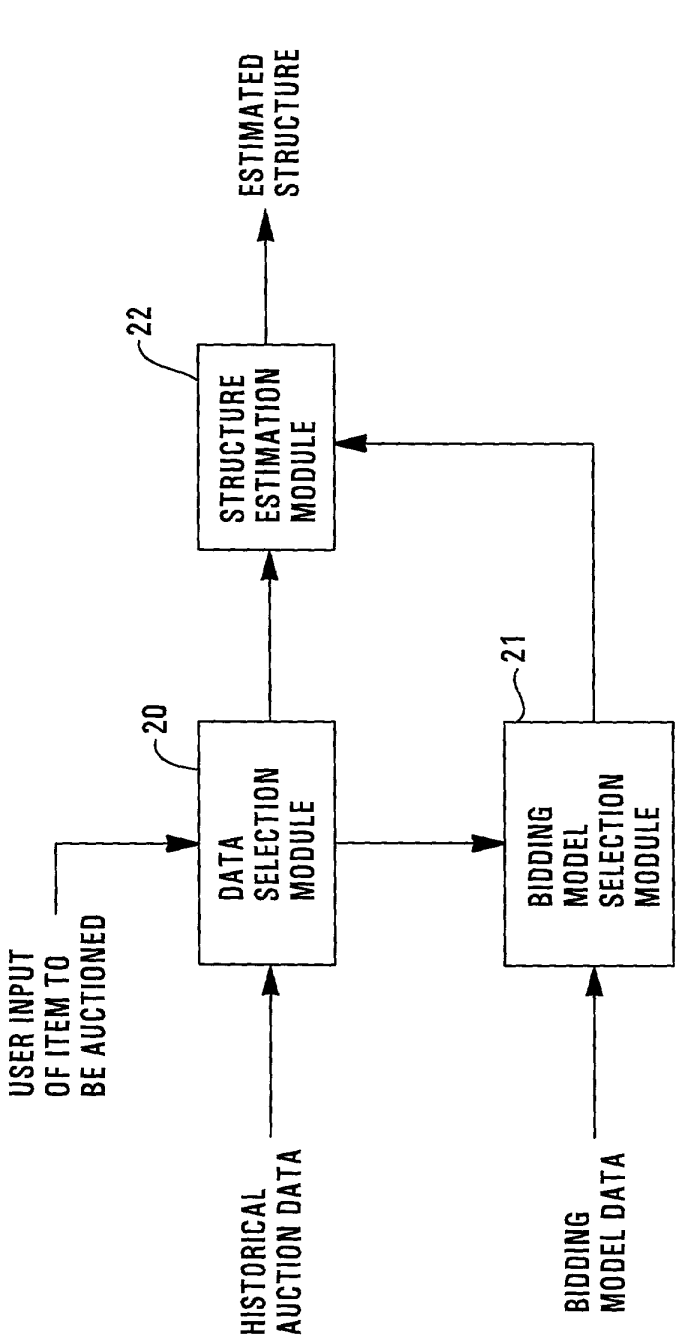
13
ESTIMATED STRUCTURE
22
STRUCTURE ESTIMATION MODULE
20
DATA SELECTION MODULE
21
BIDDING MODEL SELECTION MODULE
USER INPUT OF ITEM TO BE AUCTIONED
HISTORICAL AUCTION DATA
BIDDING MODEL DATA

Figure 2

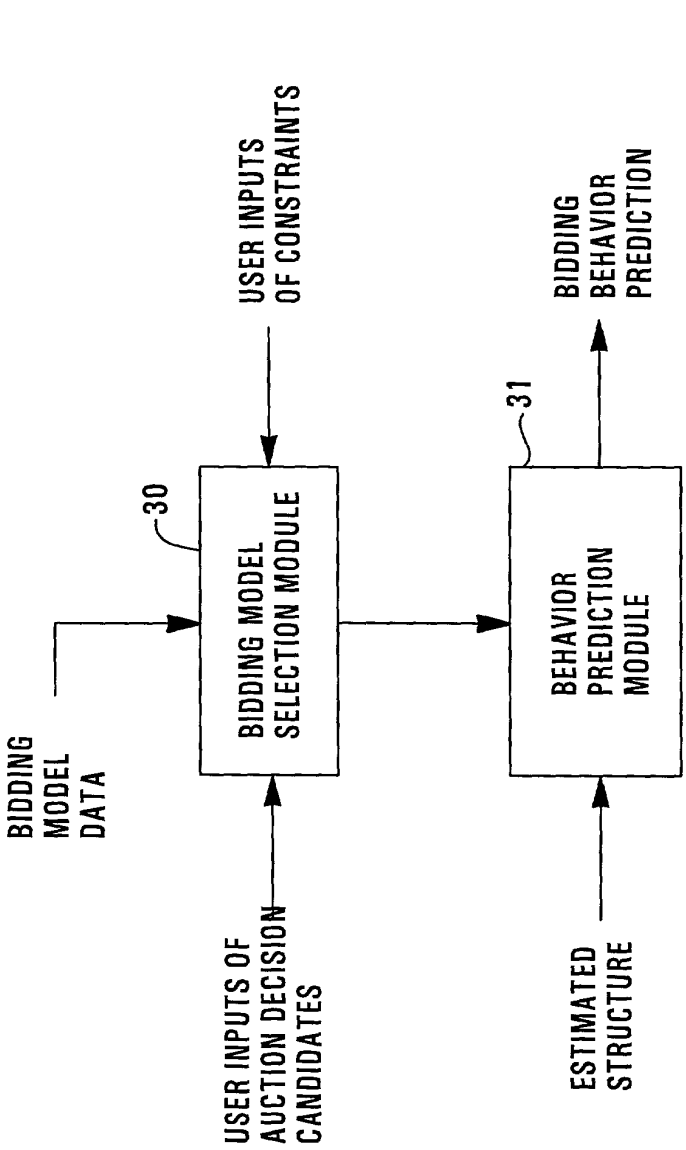

Figure 3

EXPRESS MAIL NO. EV 339 074 305 US

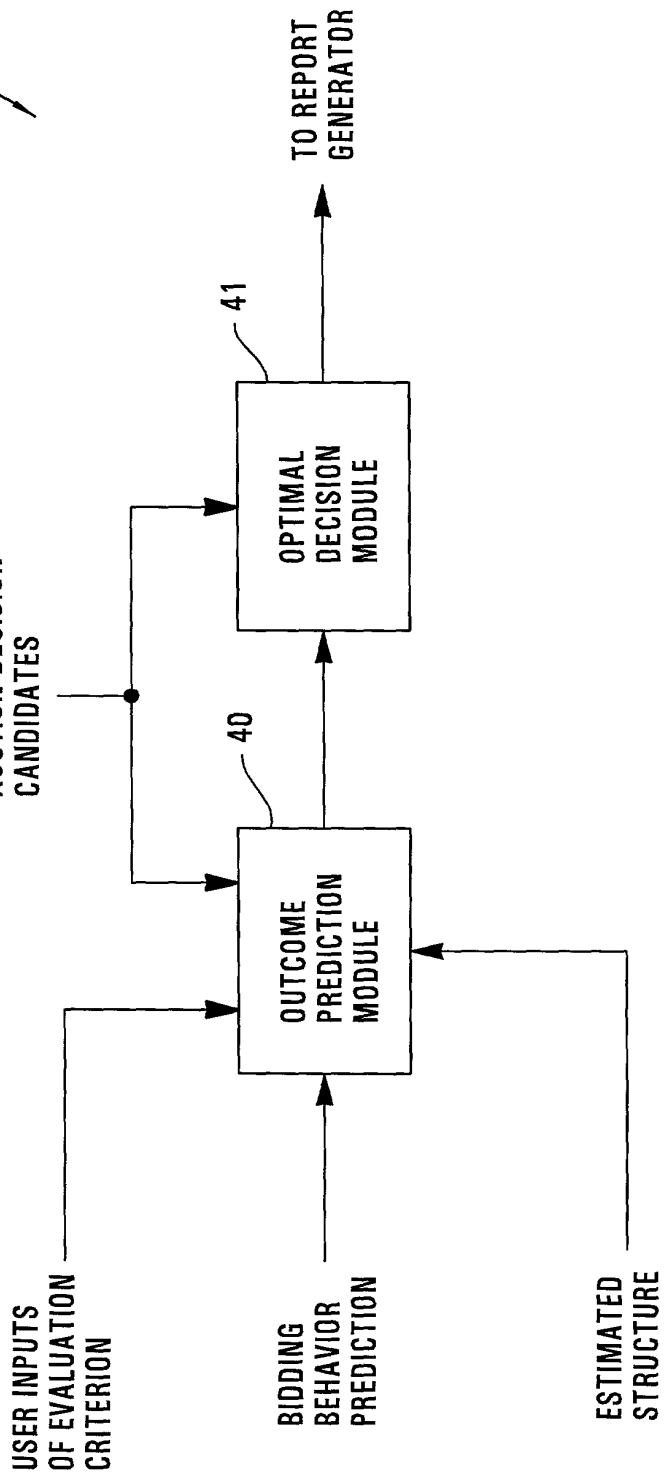
15
TO REPORT GENERATOR
41
OPTIMAL DECISION MODULE
USER INPUTS OF AUCTION DECISION CANDIDATES
40
OUTCOME PREDICTION MODULE
USER INPUTS OF EVALUATION CRITERION
BIDDING BEHAVIOR PREDICTION
ESTIMATED STRUCTURE

Figure 4

DATA SELECTION MODULE

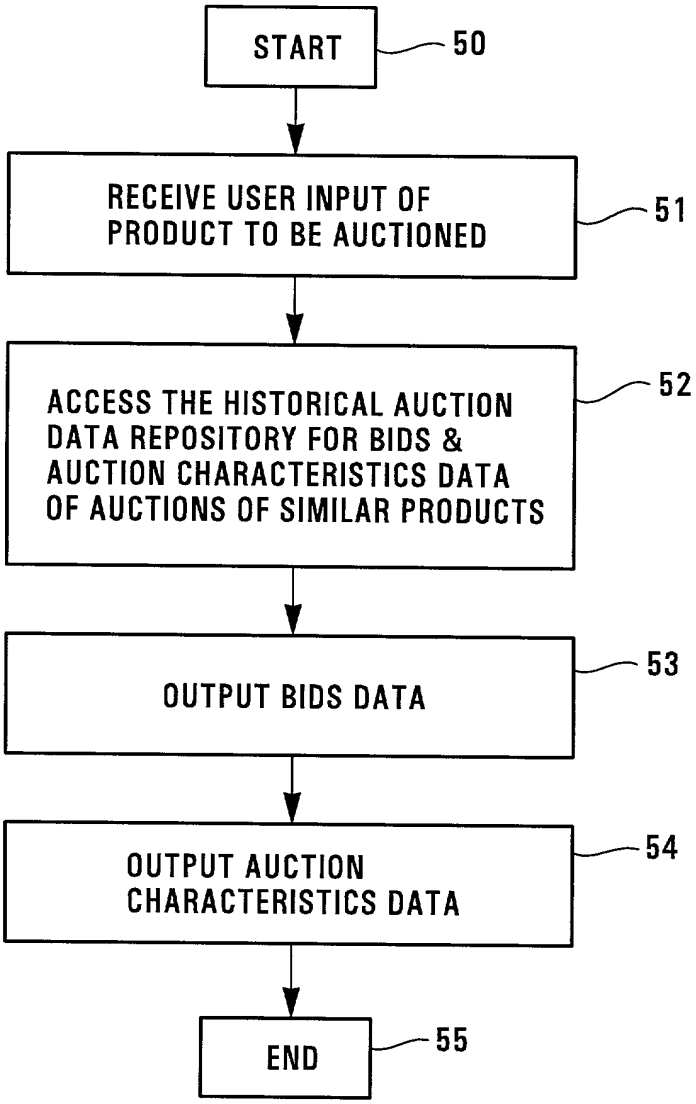

Figure 5

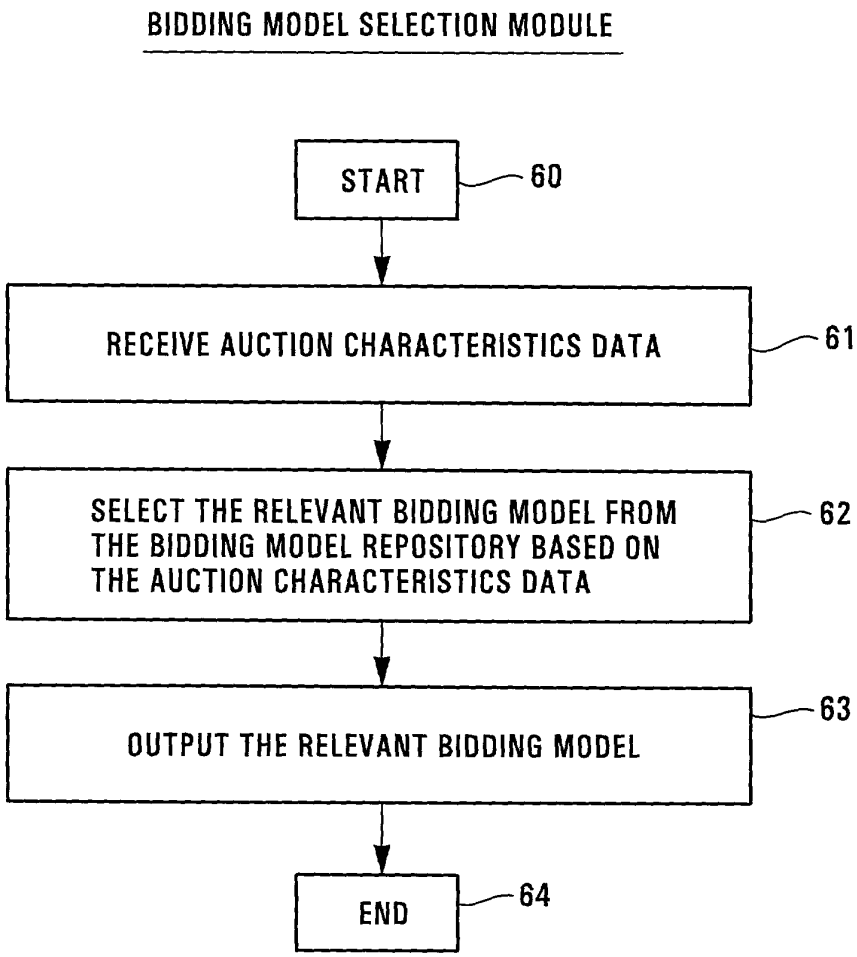
BIDDING MODEL SELECTION MODULE
START
60
RECEIVE AUCTION CHARACTERISTICS DATA
61
SELECT THE RELEVANT BIDDING MODEL FROM THE BIDDING MODEL REPOSITORY BASED ON THE AUCTION CHARACTERISTICS DATA
62
OUTPUT THE RELEVANT BIDDING MODEL
63
END
64

Figure 6

STRUCTURE ESTIMATION MODULE

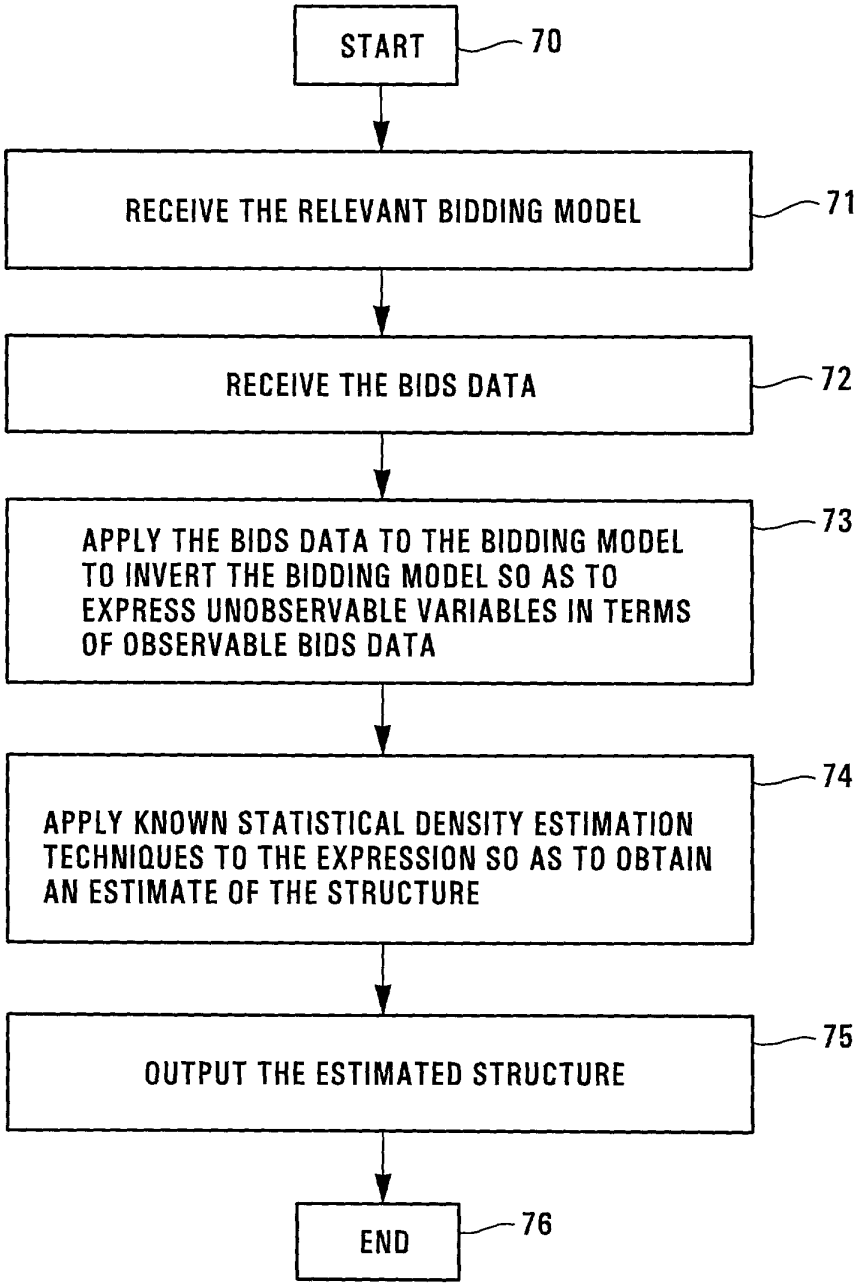

Figure 7

0501-0304

BEHAVIOR PREDICTION MODULE

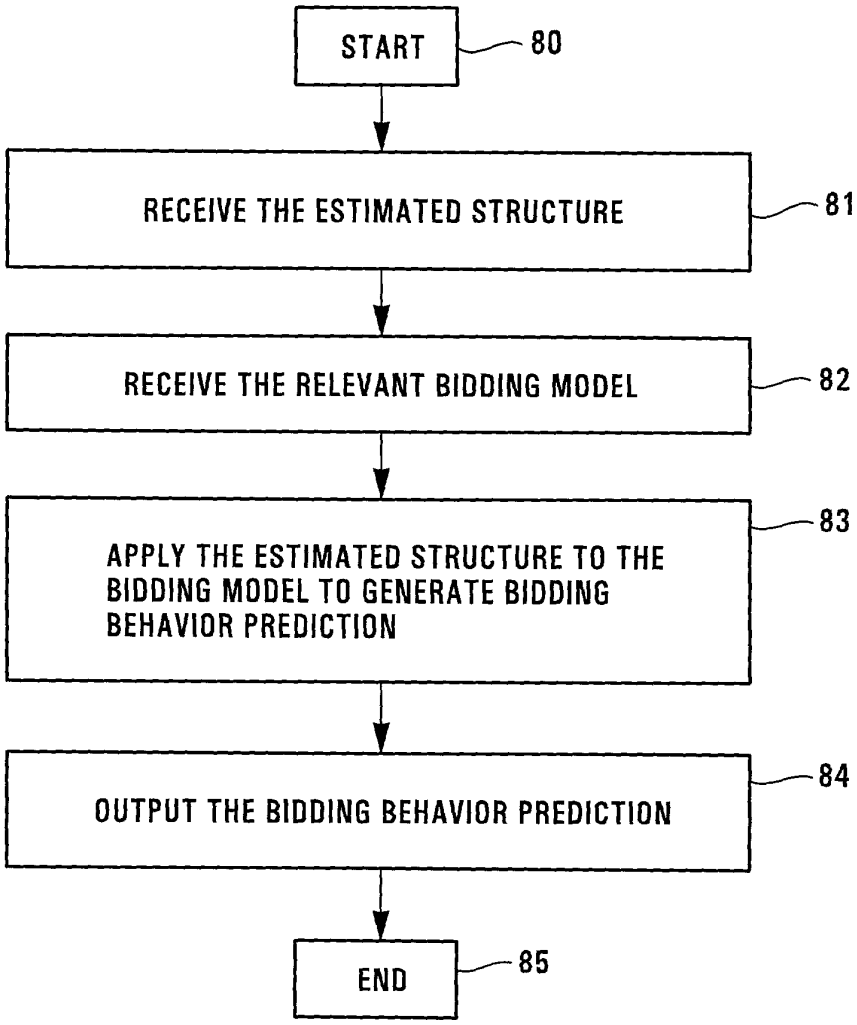

Figure 8

OUTPUT PREDICTION MODULE

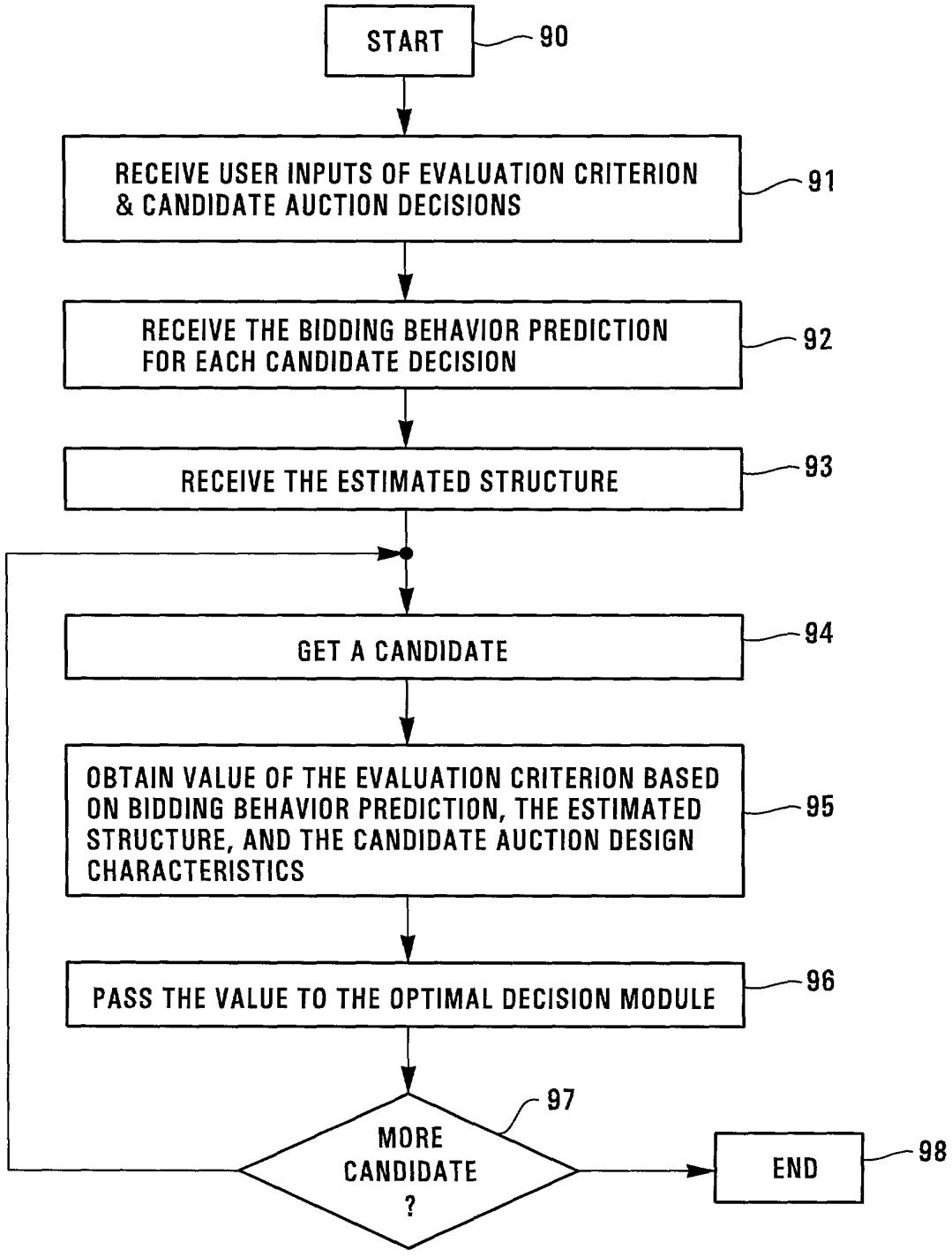

Figure 9

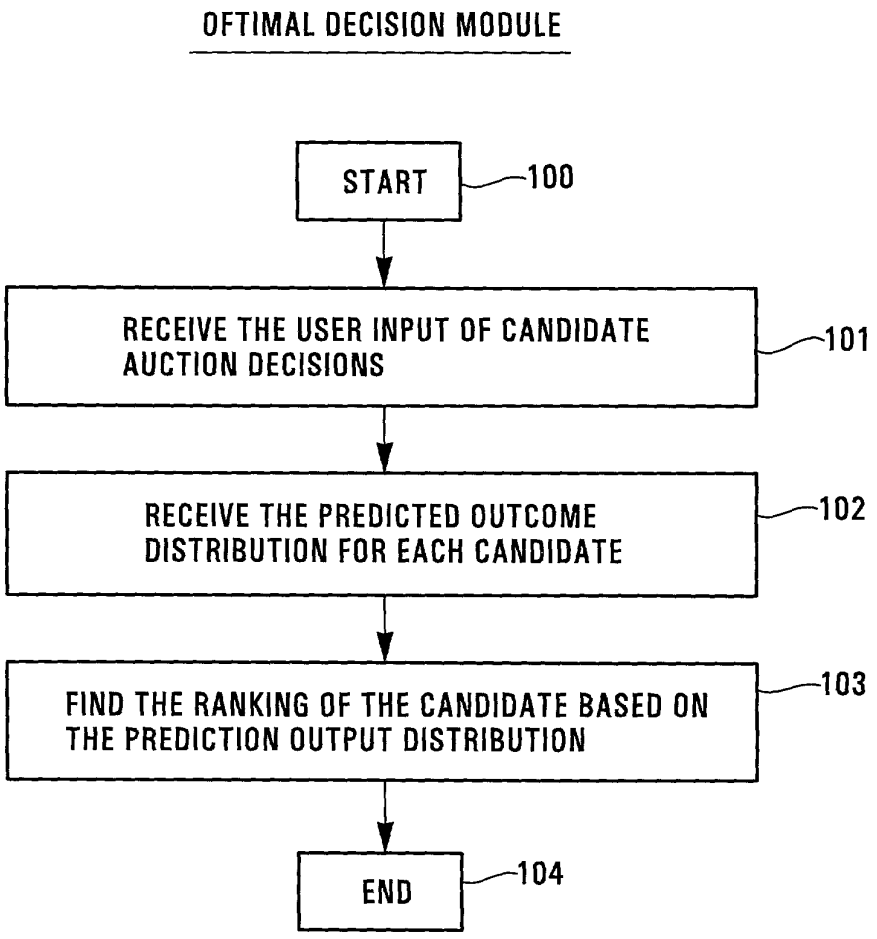
OFTIMAL DECISION MODULE
START
100
RECEIVE THE USER INPUT OF CANDIDATE AUCTION DECISIONS
101
RECEIVE THE PREDICTED OUTCOME DISTRIBUTION FOR EACH CANDIDATE
102
FIND THE RANKING OF THE CANDIDATE BASED ON THE PREDICTION OUTPUT DISTRIBUTION
103
END
104

Figure 10